

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Report Prepared for
Eaton Lighting Division
(formerly Cooper Lighting)
io LED

Report Number: P397318

Luminaire Tested: **8VRVT2-LD5-12-FR50-UNV-LR63-CD2-WL-U**

Issue Date: 3/3/2020

Tested By:

Approved By:



NVLAP Lab Code: 200050-0

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Results contained in this report are valid for luminaire sample tested.
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Test Information

Test Method: LM-79-08
 Report Number: P397318
 Test Lab: INNOVATION CENTER(G3)
 Issue Date: 3/3/2020
 Manufacturer: EATON (FORMERLY COOPER LIGHTING)
 Product Line: io LED
 Catalog Number: 8VRVT2-LD5-12-FR50-UNV-LR63-CD2-WL-U
 Description:
 Light Source: -
 Ballast/Driver: -

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
	AS-5443-2	Good	REFLECTOR
	AS-5443-3	Good	DRIVER
	AS-5443-4	Good	UPPER MODULE
	AS-5443-5	Good	LENS
	AS-5443-6	Good	DRIVER 2
	AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
 Luminaire Lumens: 1963.5 lumens
 Efficiency: N/A
 Efficacy: 7.5 lumens/watt
 Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34
 Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')
 CIE Type: Direct

Input Watts (W): 262.1
 Input Voltage (V): NR
 Input Current (Ain): NR
 Voltage Rise (V): NR
 Power Factor: NR
 Total Harmonic Distortion (THDi): NR
 Frequency (hertz): 60
 Stabilization Time: NR
 Operation Time: NR
 Ambient Temperature (°C): NR
 Test Distance: 25 FT

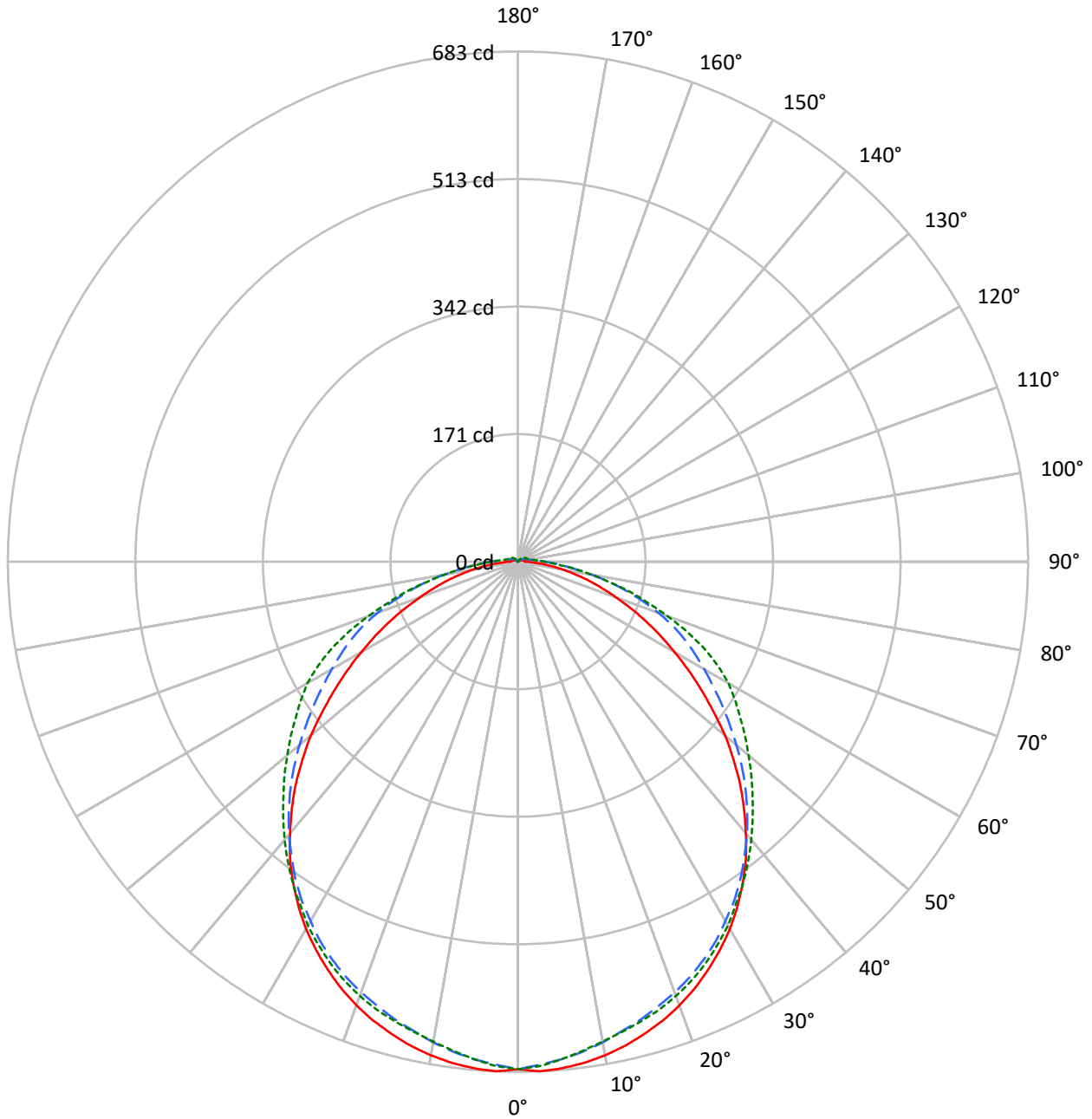


Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	P1		
Power Meter			

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									20									
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	118	118	118	118	115	115	115	115	110	110	110	105	105	105	100	100	100	98																												
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83	80																												
2	98	89	82	76	95	87	81	75	83	78	73	79	75	71	76	72	69	67																												
3	89	78	70	63	86	76	69	62	73	66	61	70	64	60	67	62	58	56																												
4	81	69	60	53	79	68	59	53	65	58	52	62	56	51	60	54	50	48																												
5	75	62	53	46	73	61	52	46	58	51	45	56	49	44	54	48	43	41																												
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	38	36																												
7	64	50	42	35	62	50	41	35	48	40	35	46	39	34	45	39	34	32																												
8	60	46	37	32	58	45	37	31	44	36	31	42	36	31	41	35	30	28																												
9	56	42	34	28	54	42	34	28	40	33	28	39	32	28	38	32	27	26																												
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23																												

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.8	3.2
10°-20°	181.0	9.2
20°-30°	273.1	13.9
30°-40°	326.0	16.6
40°-50°	332.4	16.9
50°-60°	297.5	15.2
60°-70°	235.2	12.0
70°-80°	145.5	7.4
80°-90°	61.2	3.1
90°-100°	21.8	1.1
100°-110°	11.6	0.6
110°-120°	7.6	0.4
120°-130°	4.4	0.2
130°-140°	2.0	0.1
140°-150°	0.3	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	518.0	26.4
0°-40°	843.9	43.0
0°-60°	1473.8	75.1
0°-90°	1915.8	97.6
90°-120°	41.0	2.1
90°-150°	47.7	2.4
90°-180°	48.0	2.4
0°-180°	1963.5	100.0

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
45°	1507	1261	1218
55°	1314	1106	1108
65°	1108	981	981
75°	909	772	689
85°	726	470	363

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	680	680	680	680	680	
5°	681	676	669	672	669	65
15°	655	644	635	639	637	185
25°	603	590	588	595	594	278
35°	525	515	520	526	526	328
45°	421	418	431	442	444	324
55°	300	307	333	357	363	269
65°	189	202	246	272	275	188
75°	98	118	149	155	155	104
85°	30	47	61	61	59	31
90°	10	25	36	37	36	6
95°	9	14	23	23	23	7
105°	7	7	12	14	13	8
115°	4	4	8	11	11	4
125°	2	1	5	8	9	2
135°	1	1	2	4	5	1
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0

TEST NUMBER: P397318

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	680.0	680.0	680.0	680.0	680.0
2.5°	683.5	679.6	674.5	678.0	676.4
5°	681.2	676.1	669.4	671.6	669.4
7.5°	677.4	671.0	662.4	663.3	661.1
10°	671.6	664.0	654.0	655.0	652.8
12.5°	664.3	655.0	644.1	647.6	645.4
15°	655.0	644.4	635.2	639.0	637.4
17.5°	644.8	633.2	624.6	630.7	629.4
20°	632.6	619.8	614.4	620.1	619.2
22.5°	618.8	605.1	602.2	608.6	607.6
25°	603.2	590.4	588.4	594.8	594.2
27.5°	586.2	572.8	573.7	579.2	578.8
30°	568.0	556.1	555.8	563.2	562.8
32.5°	547.5	535.6	538.8	544.6	543.6
35°	525.1	515.5	519.6	526.0	526.0
37.5°	501.7	492.8	498.2	504.9	506.5
40°	475.2	468.5	477.4	485.4	486.4
42.5°	448.3	443.8	454.7	463.7	465.6
45°	420.8	417.6	431.3	442.2	444.5
47.5°	391.3	391.3	407.0	420.1	424.3
50°	362.2	362.2	382.1	398.4	403.2
52.5°	329.9	334.4	357.1	376.6	383.7
55°	300.1	306.9	333.1	356.8	363.2
57.5°	270.7	279.0	309.7	337.3	344.6
60°	242.2	253.4	288.0	317.4	325.7
62.5°	215.3	227.2	267.2	296.0	301.7
65°	189.1	202.2	246.4	271.7	275.2
67.5°	163.8	180.8	224.6	243.8	245.1
70°	139.5	159.3	200.0	214.4	212.5
72.5°	118.4	138.2	174.7	184.6	181.4
75°	97.9	118.4	149.4	155.2	154.9
77.5°	78.7	98.9	124.8	128.0	124.8
80°	60.5	80.6	100.5	102.1	99.2
82.5°	45.1	62.4	79.0	80.0	78.4
85°	30.1	47.0	61.1	61.4	58.9
87.5°	18.2	34.2	46.7	47.4	45.4
90°	9.9	24.6	36.5	36.8	35.5
92.5°	9.3	17.9	28.2	28.8	28.2
95°	9.0	13.8	22.7	23.4	22.7
97.5°	9.0	11.2	18.6	19.5	18.9
100°	8.3	9.3	15.7	16.6	16.3
102.5°	8.0	7.7	13.8	15.0	14.4
105°	7.0	6.7	12.2	13.8	13.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
115°	3.8	3.5	8.3	11.2	11.2
117.5°	3.2	2.9	7.7	10.6	10.9
120°	2.6	2.2	6.7	9.6	10.2
122.5°	2.2	1.6	5.8	9.0	9.6
125°	1.6	1.0	5.1	8.0	9.0
127.5°	1.3	1.0	4.2	7.0	8.0
130°	1.0	0.6	3.5	6.4	7.0
132.5°	1.0	0.6	2.6	5.4	6.1
135°	0.6	0.6	1.9	4.5	5.4
137.5°	0.6	0.3	1.3	3.5	4.5
140°	0.6	0.3	0.6	2.9	3.5
142.5°	0.3	0.3	0.3	1.9	2.6
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

Eaton Lighting Division Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



NVLAP Lab Code: 200050-0



This test was performed under the Supervised Manufacturer's Testing Program.
The results of this test have not been influenced by sources from within Eaton or from external interests.

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AC Power Source			
DC Power Supply			
Room Thermometer			

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— 0°-180° - - - 45°-225° - - - - 90°-270°

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165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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107.5°	6.4	5.8	11.2	12.8	12.5
110°	5.4	5.1	10.2	12.2	12.2
112.5°	4.5	4.2	9.3	11.5	11.5